California Coastal Setting

- High Density population centers
- Mediterranean Climate
- 1100 mile of open ocean coastline, excluding our islands
- Extreme tide range of 10-11 feet
- Maximum storm surge approximately 1 foot
- Cyclonic storms from the north Pacific – Gulf of Alaska with subtropical influences (Pineapple Express)
- High relief coastline and coastal watersheds
- Narrow continental shelf ¼ to 20 miles wide (average ½ to 2 miles)
- Winter-long El Nino events

California Scio-economic Setting

- Population of 36 million (1/8 of nation's)
- 565 million annual day visits to beach areas (133 to 141 million – out of state)
- 78% of Californians visit the beach annually
- Beach is largest and most attended recreational site in the State (outdraws all CA's national & state parks as well as all private amusement parks combined)
- Outdoor water recreation for southern California's urban population severely limited

Southern CA is a desert, 11 inches annually, no rivers, and natural lakes

- Large low-income minority populations in close proximity to the coast. Largest groups on the beach are minorities.
- Generates $61 billion in spending

  <u>Tax Revenues Generated:</u>

  Federal: $ 8.1 billion (excluded SS taxes of $5.5 b)

  State: $ 4.6 billion

(Local tax revenues considerably less and used for direct maintenance of beaches, safety, cleaning, restrooms, utilities, etc.)

What are California's Beach Associated Problems?

- Dammed natural sediment (flood control & water supply) 4.5 bcy in soCal coastal watershed storage, Matilija/ Ringe dams, Concrete channels, L.A. & San Gabriel Rivers, 50% other rivers Breakwaters and jetties
- Reduced flood flows (fill up wetlands)

Reduced hydraulic carrying capacity through coastal wetlands filling them up.

- Shoreline damage due to severe winter storms

- Limited amount of outdoor water recreation
  - 80% of Californian live within an hours drive of the coast
  - Shrinking beach resources
  - Increasing population

- Local and State economic constraints to remediate problems

What are some of our challenges?

- Redistribution of confined sediments
- Restoring 24 miles of critically eroded shoreline
- Maintenance of a national and global wide natural resource with no direct revenue source
- One-dimensional Federal Shore Protection Program
- Stubborn OMB

What are we doing in California to remediate our problems?

- Budgeting of State funds for nonfederal cost share
- Limited regional beach restoration projects
- Coastal Sediment Management Workgroup (CSMW)
- Master Plan Study-Connects COE missions of flood control, navigation, watershed restoration, and shore protection.
- Coordinating CCSTS and other studies with the USACE
- Enacting new State mandates – PBRP

CORPS Processes
(Formulation, Construction, Renourishment)

Too slow, too costly, too restricted by policy,
too bureaucratic, too risky for continued funding

- Does not recognize geographical differences
- Does not take in account social, economic, recreational, environmental, or global competitiveness needs
- One-shoe fits all policies are counter productive to the needs of California as well as the nation.
- HQ during the AFB (Alternative Formulation Briefing) fails to send technical expertise to the briefing.
- Construction/Renourishment
  Inflexible authorizations

PBRP Supports the U. S. Army Corps of Engineers

- Grateful for the USACE Shore Protection Program
  - Authorities (that work for us)
  - Expertise
  - Exceptional staff
  - Appropriations

- Defend the USACE Program and the staff on a regular basis
  - Department level
  - State Administration
  - Local & Regional Governments
  - Public
  - NGO's (watchdogs)

- Looking for a long-term commitment
  - Marriage not a partnership

Recommendations to the USACE

- Promote equity between Missions.
- Respond to the needs of your partners
- Assist Congress and the Administration in recognizing coastal zone contributions to the national economy and infrastructure needs to remain globally competitive.
    - CZ counties contribute 8 times more income than inland counties
    - CZ is 13% of land with 50% of the population

- Develop an economic analysis that details all benefits derived from SP projects
    - specifically by adding separate benefit categories in the NED Analysis
        - environmental enhancement
        - national benefits for international tourism
        - collateral benefits derived by sediment budget enhancement

- Develop templates and policies that respond to regional needs, not a one-size fits all approach.

- Continue to empower your staff to find **solutions to problems, not problems to solutions.**

What CERB can do

- Think out of the coastal engineering box
- Embrace the role of "**Science Serving Society**"
- Economics is a major component of engineering
- Initiate a study to analyze all NED impacts associated with a Shore Protection Project
- Report on the different needs of our distinct regional coasts.
- Promote equality by developing a coastal research facility on the west coast.
- Develop shoreline change, wave, and sediment models directly applicable to the west coast.